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## SEMI-ANNUAL TECHNICAL REPORT

### INTERNATIONAL BEHAVIOR: AN OVERARCHING FRAMEWORK FOR ANALYSIS

This report covers the period March 1, 1975 through July 31, 1975.

This report constitutes the final technical report of year one of the International Behavior Analysis (IBA) Project, which is designed to produce comparative and empirical generalizations about how, when, and why nations are likely to act, react, and (therefore) interact within the international system. The analysis of three distinct kinds of behavior fall within the scope of the IBA Project. First, the project is interested in discovering the sources of national action. When nations decide to act externally they do so in response to certain domestic and/or foreign stimuli. Accordingly, it is possible to identify three domestic (or internal) and two foreign (or external) stimuli: (1) psychological; (2) political; (3) societal; (4) interstate; and (5) global systemic. These stimuli represent collections--or components--of factors which may lead a nation to take a specific external action.

The second kind of behavior which falls within the purview of the IBA Project concerns the processes surrounding initiative decision-making. After a set of conditions give rise to a decision occasion, that is, after certain stimuli function as the source(s) of action, a nation must decide how to respond to the stimuli. Who is involved? What agencies and institutions are to assume important (decision-making) roles? How are interstate and global systemic conditions perceived by the decision-makers? Such questions represent but a sampling of those relevant to the conduct of initiative process analysis.

When a nation decides to initiate an action it responds to a set of stimuli essentially unrelated to the direct actions of other states. Behavior of a different nature is thus associated with the processes of responsive decision-making which occur when a nation is acted upon, that is, when, for example, nation A directs an action at nation B. The decision-making processes which occur within nation B illustrate the third kind of behavior with which the IBA Project is concerned.

In addition to explaining and predicting the sources and processes of international-foreign policy behavior, the project hopes to specify the conditions under which certain nations might initiate or respond to certain events. Consequently, it has been necessary for the Project to provide the means by which nations and events may be classified. Two classificatory schemes have thus been developed.



All of the above has been incorporated within a single analytical framework. Indeed, the past contract year has been devoted almost exclusively to framework construction. The following sections will thus devote themselves to the important elements of the framework, as well as to the processes which lead to its construction. As will become clear, the framework may soon be utilized to conduct empirical source and process analyses.

PART I

## A. INTRODUCTION

Foreign policy has been the object of intense scrutiny at least since Thucydides chronicled the Peloponnesian Wars. Over the years political philosophers and, more recently, social and political scientists have recognized the impact which the conduct of foreign policy invariably exerts upon the domestic and global milieus. Very recently, the study of foreign policy has evolved into a social scientific field of inquiry, with a subject matter of its own. No longer inextricably tied to the broader study of "international relations," foreign policy analyses are now conducted by those who identify with a specific body of scholars and literature (facilitating the cumulation of knowledge), generally preoccupied with the production of scientific insight into the sources and (decision-making) processes of foreign policy behavior. Moreover, since the preoccupation often extends into the realm of the comparative, analysts attempt to provide insight into the behavior of different states in the contexts of different foreign policy events. By steadily increasing numbers, then, this new field has come to be known as the comparative study of foreign policy.

The field itself has developed along several lines. When the behavioral wave hit the international relations research beach, foreign policy analysts were busy constructing and testing random hypotheses (see Jones and Singer, 1972; and McGowan and Shapiro, 1973). Unfortunately, very few of these hypotheses have been confirmed and still fewer have been organized into a coherent and cumulative whole.

In anticipation and as a result of such disorder, many foreign policy analysts have engaged in the construction of conceptual frameworks. These devices have enabled them to portray reality--and, consequently, conduct



analyses--much more manageably. Accordingly, many source and process frameworks have been constructed and implemented, albeit with little or no real success.

Significantly, this paper maintains that the "framework construction strategy" represents a truly productive path to the comprehensive, empirical, comparative, and policy-relevant explication of foreign policy behavior, and that the disorder and intellectual paucity of the past may be traced not to the existence of such frameworks, but directly to their inherent--yet corrigible--limitations.

What follows thus represents an attempt to construct yet another conceptual framework. Building upon the work of many architects, the paper proceeds slowly and simultaneously addresses problems indigenous to analytical framework construction and the whole of social inquiry. The goal, of course, is to construct a framework which is as representative (of reality) as possible. (Since such a framework should lead to the "discovery" of reality, the task at hand is unconcerned with the construction and implementation of a prescriptive framework or, relatedly, with the "inventing" of reality). Hopefully, when the journey is completed a contribution will have been made to the comparative study of foreign policy.

#### B. THE PERENNIAL PROBLEMS OF SOCIAL INQUIRY

Social Scientists are all too often unaware of the processes which determine the nature and purpose of their analyses. Invariably, these processes are comprised of a number of related tasks which require analysts to (1) locate a general area into which to delve; (2) specify a goal(s); (3) select an approach(es); and (4) implement an appropriate method.<sup>1</sup>

These general tasks logically give rise to a number of particular subsidiary ones which are often performed unconsciously and/or simultaneously and which--nonetheless--remain critical to the understanding of the processes of inquiry and the production of reliable and useful knowledge.

Task one thus requires the analyst to specify the general area into which to delve, which essentially amounts to a selection of subject matter (reality). A comfortable means by which such parameters may be located revolves around the conceptualization and utilization of analytical levels.<sup>2</sup> The levels themselves are "corresponding" and refer to five analytic areas or spaces from which causal or independent variables may be extracted and on which the behavior or phenomena in question normally occurs. Figure 1 illustrates the five levels of analysis and their dual nature.

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Insert Figure 1 here  
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The above conceptualization is not only useful in pinpointing a general area into which to delve, but in selecting the means which might light the way into that area as well. Indeed, the utilization of an elaborate conceptualization of levels of analysis should enable those who identify with a particular social scientific field or subfield to locate the boundaries of their subject matter more systematically. More importantly, the analytic relationships between such fields and sub-fields may be highlighted through the utilization of the above conceptualization.<sup>3</sup>

Task two requires the analyst to specify his or her analytic intentions.<sup>4</sup> While "the production of knowledge" may be regarded as the general research goal, some specification is necessary in order to understand and appreciate

the particular goals of inquiry. Following an assessment of the selected subject matter's degree of recalcitrance, an attempt should be made to determine the nature and form of the knowledge to be produced. This involves a specification as to the natural power of the knowledge, that is, as to whether the knowledge is intended to describe, explain, or predict the phenomenon in question. It also involves specification--depending upon how description, explanation, and prediction are defined--as to whether the knowledge is to be expressed as facts, concepts, hypotheses, low-level generalizations, propositions, or high-level generalizations.

While an analyst may aspire to the production of variant knowledge, the field of choice in terms of the ultimate purpose of inquiry is far more narrow. Indeed, it is here proposed that knowledge be produced not as an end in itself but for its potential to contribute to the rationality of public policy decision-making. More specifically, this is to propose that analysts engage in inquiry.

. . . so that others can be informed of the probable consequences of their choices, the hope being that they will use the knowledge for good rather than for evil ends. In truth, the desire to influence the decisions of others: so as to promote the achievement of what is regarded as the good life may be the guideline purpose (Van Dyke, 1960: 4).

This, of course, is not to suggest that social scientists enlist en masse into the ranks of the politically active or devote all of their time to the solving of immediate problems. Rather, it is to suggest that analysts attempt in a systematic way to identify the informational needs of policy-makers within their sphere of intellectual influence and attempt, also in a systematic way, to satisfy some of those needs. Such activity--it must be pointed out--would in no way preclude analysts from making research decisions, and in many

cases would merely amount to conducting research with a keen eye toward how the results might ease some of the decisional burdens of public policy-makers and thereby improve the quality of life.

Having decided precisely what and why to investigate, the analyst should attend to how the inquiry is to be conducted. The third task thus involves the selection of an approach (or approaches, as the case may be), which amounts to a qualitative characterization of the research questions to be posed. Examples of popular approaches include those identified with academic disciplines, such as sociological and psychological approaches, and those identified with some salient features of political existence, such as institutional, legal, systemic, and structural-functional approaches.<sup>5</sup>

The successful completion of task four results in the designation of the processes associated with the acquisition and treatment of data. Within the past decade the selection of an appropriate method has revolved around the "traditional-behavioral" debate, but recent developments in the social sciences should encourage analysts to approach questions of method more rationally.<sup>6</sup> Indeed, it appears as though the time is finally ripe for the development of a qualitative-quantitative methodological synthesis in the social sciences.

#### C. ANALYTICAL FRAMEWORKS AND THE PERENNIAL PROBLEMS OF INQUIRY

With an implicit or explicit eye to the successful completion of the above tasks, many contemporary social scientists attempt to construct and implement analytic models or frameworks.<sup>7</sup> The strategy enables them to cope abstractly with an otherwise overly complex world. Indeed, by the



very nature of their work, social scientists must rely upon analytical strategies which are inferior to those employed by their counterparts in the physical sciences. By constructing and implementing detailed isomorphisms, it is possible for social scientists to approximate a kind of controlled experimentation, and to portray relationships systematically and coherently. Well constructed frameworks thus enable analysts to discover reality (as opposed to that which prescriptive frameworks encourage analysts to "invent" or construct) insofar as such reality may be located, described, explained, and/or predicted within--or at the hands of--the construct. Recognizing that frameworks can never portray all of reality and are therefore always incomplete, analysts are thus capable of producing knowledge relevant to a specific subject matter. More specifically, frameworks enable analysts to locate and specify the independent, intervening, and dependent variables arising from the causal and effectual levels of analysis which may be found in and around the device. Extracted directly from the framework, such variables are in turn structured into testable hypotheses.

Analytic constructs designed to facilitate the conduct of productive analyses are themselves often plagued by their own limitations (see Kaplan, 1964: 275-288). More to the point, analytic frameworks which cannot claim to be (1) comprehensive, (2) conceptually salient and flexible, (3) operationalizable, and (4) "policy relevant" cannot facilitate the production of reliable and useful knowledge.<sup>8</sup> While it might be argued that such "criteria" represent arbitrary selections, they may also be viewed as directly descendent from the goal of producing reliable and useful knowledge (in any form) and related to the aforementioned "tasks" of inquiry.



The first criterion thus requires frameworks to specify the behavior or phenomena in question comprehensively. While the criterion by no means requires analytic frameworks to deal with all of the behavior which normally occurs on all of the affectual levels of analysis or within a given field or sub-field, it does require that the necessary causal and effectual levels be represented. Moreover, the ideal framework should enable analysts to select and implement appropriate approaches and methods.

The second criterion, conceptual salience and flexibility, imbues a framework with the capability of producing knowledge which is specifically related to the nuances of a particular behavior or phenomena. For example, where intervening variables should mediate the relationship between a set of independent and dependent ones, the ideal framework should enable analysts to so construct their hypotheses. Where comparison becomes desirable (that is, the implementation of the comparative method), the framework should be capable of easily accommodating comparative analysis; and where pieces of reality need to be integrated into or deleted from the framework, the operation should not distort or in any way encumber the framework's continued ability to facilitate the construction and scrutinization of important hypotheses.

Operationalizability is much more straightforward. Descending primarily from the goal of producing reliable knowledge, this third criterion requires that the ideal framework remain amenable to the utilization of productive methodological strategies.<sup>9</sup>

Public Policy, (-making) relevance, discussed above within the context of analytic goals and purposes, requires the ideal framework to yield knowledge which real-world decision-makers might find useful. Obviously, if frameworks are to produce relevant knowledge they must be constructed with an eye to

the tasks which public decision-makers must perform.

#### D. FOREIGN POLICY ANALYSIS AND THE PERENNIAL PROBLEMS OF INQUIRY

How many analysts proceed from an explicit and precise understanding of the tasks of inquiry? How many construct and implement analytic frameworks which are comprehensive, salient, flexible, operationalizable, and capable of producing policy relevant knowledge? While far too few have successfully completed the process as it has been outlined here, many of those associated with the analysis of interstate political and foreign policy behavior have committed some of the most serious errors. Indeed, while members of the social science community have been--and are likely to remain--incessantly preoccupied with the analytic implications of "scope and method," scholars of interstate politics and foreign policy have been especially plagued. As a matter of fact, the problem of method has so permeated the fields that one author has actually characterized their entire intellectual development according to the dominant method of each developmental stage (Pfaltzgraff, 1972). Many other authors have found it necessary to relocate the boundaries of the fields each time they embark upon a research journey; while nearly everyone at one time or another has participated in the debate over the appropriate goals of analysis.<sup>10</sup>

As a recognized subfield of the study interstate politics, the study of foreign policy has been immensely popular.<sup>11</sup> Over the years literally hundreds of analysts, embracing a host of alternative and very often competing approaches and methodologies, have engaged in what may roughly be described as foreign policy analysis. Unfortunately, the vast majority of these

analysts also failed to proceed from a well-defined scope, having instead opted to dip and dive at poorly defined foreign policy phenomena as though they were unrelated and analytically distinct. The issues associated with the designation of the appropriate goals of foreign policy analysis have, paradoxically, received far too much and too little attention; while the problem of "theory-building" has long commanded serious attention, the so-called "relevance problem" has been virtually ignored. Additionally, the subject of approaches to the study of foreign policy has received only light attention, while the subject of method has been irrationally handled.<sup>12</sup>

In spite of such failures, foreign policy analysts have often engaged in the construction of analytical frameworks, which have necessarily failed to satisfy at least one of the aforementioned criteria (see Andriole, 1974a and 1974b; and Andriole, et al., 1975b). Figure 2 lists those who, since 1945, have implicitly or explicitly constructed foreign policy analytic frameworks. The figure attempts to "score" the frameworks along a four dimensional continuum.

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 Insert Figure 2 Here  
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As the chart illustrates, there is room for yet another framework. Yet, as has already been indicated, successful analytic framework construction is vastly dependent upon how much attention is devoted to the perennial tasks of inquiry. Accordingly, in order to construct and implement an improved framework for analysis, it is necessary to deal--again--with matters of 'scope and method.'

As part of the prescribed research path, then, the following are proposed as the research boundaries to the study of foreign policy.<sup>13</sup> First, foreign policy analysis involves inquiry into the sources of action; that is, into the factors, determinants, or "causes" of foreign policy action; second, the study of foreign policy necessarily involves inquiry into the decision-making processes of policy formulation and implementation; and finally, foreign policy analysts ought to concern themselves with the interstate relations, or interactions, which occur within the global system after policies have been implemented, that is, after they become foreign policies. The study of foreign policy thus involves inquiry into (1) the sources of action; (2) the decision-making processes of policy formulation and implementation; and (3) interactions which result from policy implementation. Figure 3 illustrates the nature of source analysis.

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 Insert Figure 3 here  
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As the figure makes clear, sources may arise from two distinct environments.

Decision-makers respond to various impeti by initiating a policy, which is sometimes a foreign policy. Obviously, then, decision-making activity intervenes between sources and action, just as Figure 4 indicates.

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 Insert Figure 4 here  
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Source analysts should presume the intervention as it appears in Figure 5.

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 Insert Figure 5 here  
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Analytically, then, when one engages in source analysis one necessarily bypasses an examination of the initiative decision-making process.

There are two kinds of foreign policy decision-making, initiative and responsive, and, therefore, two kinds of decision-making process analyses. Initiative decision-making occurs when a set of internal and/or external conditions lead a state to act externally. For example, if a state were experiencing a shortage of a certain natural resource which is desperately needed for the production of certain strategic goods, it might decide to initiate a foreign policy action to alleviate the shortage. The decision to act would fall within the scope of those who study initiative decision-making. On the other end of the action-reaction sequence is the response which a state must formulate when another state (or group of states) decides to act upon it. The behavior patterns surrounding this response fall within the scope of responsive decision-making analysis. Figure 6 illustrates the processes which decision-making analysis should examine.

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 Insert Figure 6 here  
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The first two dimensions of the scope of foreign policy behavior and analysis may thus be conceptualized around the sources and processes of decision-making, since decision-making always precedes the actual implementation of policy.

The activity which follows the implementation of policy constitutes the third dimension of foreign policy behavior and analysis. When a foreign policy is launched and responded to, an action-reaction sequence is established. As the sequence persists, an interaction pattern emerges. The pattern itself constitutes what is often regarded simply as conflict or cooperation. A simple interaction pattern is depicted in Figure 7.



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 Insert Figure 7 here  
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Since foreign policy represents a continuous phenomena, it might be argued that the conceptualization and analysis of policy "sources" may be misleading insofar as policies are continuously exchanged.<sup>14</sup> This reasoning might in turn lead to the elimination of source analysis from the scope of foreign policy research. However, since reality does provide for instances of autonomously initiated foreign policies, and since interaction patterns may be broken into for analytic purposes with little distortion of reality, it may make more sense to delete the third (interaction) dimension from the scope of foreign policy analysis. The entire formal scope of foreign policy may thus be conceptualized around the sources and processes of decision-making.

With regard to the scope of foreign policy analysis and the above conceptualization of levels of analysis, foreign policy behavior may be viewed as occurring on effectual levels three and four, that is, on the composite group, or state, and the inter- and/or multistate effectual levels (see Figure 1). The causal levels appearing in Figure 1 add depth to the above conceptualizations of internal (domestic) and external (foreign) sources of policy. More accurately, causal levels one, two, and three--the individual, group, and composite group (state) levels, facilitate the identification of internal (domestic) sources, while causal levels four and five--the inter- and/or multistate and global systemic levels, facilitate the identification of external (foreign) sources (see Figure 1). Since those who engage in source analysis are concerned with the impeti behind the behavior which one

state expresses toward another, source analysts should necessarily situate themselves upon five causal and one effectual level of analysis. Figure 9 notes the shift from the vague internal/external dichotomy to the more specific analytic levels. In addition, it attempts to specify the dependent variable more specifically.

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 Insert Figure 9 here  
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The conceptualization of analytic levels coupled with the scope of foreign policy has thus lead to a more sophisticated conceptualization of foreign policy source analysis.

The analytic levels also facilitate the conceptualization and conduct of (decision-making) process analyses. Since the reality of decision-making may be viewed as an essentially (composite) group process resulting in high level (state) foreign policies, decision-making behavior and analysis may be located on effectual level three (see Figure 1). Of course, this is not to imply that one individual or agency cannot dominate the entire decision-making process. As is evident from recent U.S. history, it is often the case that major decisions are reached by but a few individuals. Such impact may be accounted for within the individual level of analysis. When other agencies, individuals, groups, and so forth, of varying natures and responsibilities interact in decisional situations, however, the reality takes on new dimensions which may be examined through the utilization of additional levels. The analysis of perceptions of such realities as public opinion, status-rank, global systemic conflict and global power distributions, also arise from the internal and external levels of analysis.

A more sophisticated conceptualization of initiative and responsive decision-making analysis appears in Figure 10.

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 Insert Figure 10 here  
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In terms of approach, it appears as though the ideal would be interdisciplinary. Intuitively, this becomes clear when one considers, for example, the sources of action. Indeed, political philosophers have already annointed such an approach positing economics (Hobson, Marx), psychology (Hobbes, Freud) and history (Hegal, Neitsche)--to name only a few--as "causes" or sources of action. Today, of course, we not only have the incomparable work of these thinkers but the systematic and highly disciplined research of contemporary analysts as well.

Along with approaches identified with academic disciplines we also have the use of many which have come to be identified with abstract aspects of political existence such as power and institutionalization, which might also contribute to the prescribed inter-disciplinary stance.

Method, of course, is a much more controversial problem. Indeed, it is nearly impossible to be even implicitly prescriptive without evoking cries from many of the same analysts who have for years been randomly dipping and diving into foreign policy phenomena. First of all, to no small extent do one's research goals and approach determine one's choice of method. For example, an analyst aspiring to the production and cumulation of reliable and useful descriptive, explanative, and/or predictive knowledge, is forced to deal with the problem of verification. Here then is a rationale for regarding empirical social scientific methods as preferable to those embracing

some other, less exact, technique of verification. This is not to say, however, that some methods are entirely inappropriate to the study of foreign policy; indeed, no method is either wholly inadequate or perfectly acceptable to the study of any phenomena. Yet, in the interest of cumulating reliable knowledge it would appear as though the most promising overarching method ought to be made dominant. Foreign policy analysts should thus proceed from a broad social scientific dominance and attempt to integrate and synthesize as many heretofore competing methodologies as possible.

#### E. FOREIGN POLICY ANALYTICAL FRAMEWORKS AND THE PERENNIAL PROBLEMS OF INQUIRY

All of the above conceptualizations facilitate the conduct of systematic foreign policy analysis. At the same time, they contribute to the construction of a conceptual framework which, in turn, might more easily enable analysts to produce reliable generalizations concerning the sources and processes of foreign policy behavior. The aforementioned criteria, as employed in the construction of a foreign policy analytical framework, thus require the following.

The first criteria, descending from the problem of identifying an adequate research scope, requires that the ideal framework treat its subject matter comprehensively. While this criterion by no means requires the device to deal with the entire scope of foreign policy, it does require that it treat comprehensively whatever aspect of foreign policy it chooses to portray. Thus, in the case of examining the sources of policy, the comprehensive criterion requires that the framework account for all possible sources of action; that is, it must isolate, identify, and provide for the eventual

ranking of both internal (i.e., those arising from within the state) source variables and external (i.e., those arising outside a state's boundaries) source variables.

Internal source variables refer to those which are instrumental in actually giving rise to a decision occasion; that is, to those ideological, psychological, economic, social, and political factors which may lead a state to take a specific external action. External source variables refer to those which, arising outside a state's boundaries, may also lead to specific external action. Examples of external source variables include alliance activities, trade agreements, military actions, global systemic conflict, as well as all those activities and conditions whose impact is absorbed by the state and not exclusively by the global system. In other words, while the above activities and conditions may be absorbed by the global system as a whole, the ideal focus is on how such activities and conditions are mediated through perception and not on how they affect the structure, persistence, or transformation of the total global system.

As for those inquiring into the processes of policy formulation and implementation, the comprehensive criterion is no less stringent. Their analytic frameworks must isolate and identify all of those factors crucial to the operation of a state's foreign policy machinery after a decision to act has been made; that is, after an internal, external, or intermix of sources require a state to initiate or respond to an external action.

Conceptual salience and flexibility require the ideal framework to provide the means through which foreign policy behavior may be conceptualized and analyzed according to how states and situations differ. The criterion requires the framework to portray foreign policy behavior and analysis as



naturally comparative. Indeed, just as real-world decision-makers respond differently to the actors (states) and parameters at hand, so too must foreign policy analysts construct frameworks which are explicitly geared for comparative analysis. As Figure 2 has already indicated, far too few architects have so geared their constructs.

The third criterion, operationalizability, simply requires the ideal framework to remain amenable to social scientific synthetic methodologies. Insofar as the production of reliable and useful knowledge is maintained as an important research goal, the third criterion requires that empirically verifiable knowledge be produced. To attain this end, it is necessary to develop measures which well reflect the concepts and variables which comprise the specific hypotheses to be tested.

The fourth and final criterion, descending directly from the goal of producing useful knowledge, requires the ideal framework to yield information which decision-makers might find useful. As stated, this first involves inquiry into the actual informational needs of decision-makers, and, secondly, into how such needs might be satisfied.

#### F. EN ROUTE TO A PRODUCTIVE CONCEPTUAL FRAMEWORK

In order to conduct sophisticated foreign policy analyses, a conceptual framework might be constructed and implemented. Such a strategy is immeasurably preferable to one which encourages the random construction and scrutinization of unrelated hypotheses. Unfortunately, many foreign policy analysts have adopted the random strategy and have succeeded only in producing a disparate, uneven, and noncumulative collection of queries (see especially Jones and Singer, 1973 and McGowan and Shapiro, 1973). The ideal framework should

invite orderly inquiry into the entire scope of foreign policy, which should necessarily descend from an accurate and comprehensive conceptualization of reality; to be sure, one should never lose sight of the fact that analytic frameworks are useful only insofar as they reflect and portray aspects of reality. While there are of course roles which prescriptive frameworks should play, descriptive-conceptual frameworks must represent accurate isomorphisms of the real world.

The specific task at hand thus requires that a reasonably isomorphic source/process, comparative, operationalizable, and policy relevant framework be constructed.

As an initial point of departure, reference might be made to Figure 9, where a conceptualization of levels of analysis facilitated a more coherent conceptualization of foreign policy source analysis. Where Figures 3, 4, and 5 referred simply to internal (domestic) and external (foreign) sources of policy, Figure 9 utilized the causal levels of analysis to portray the entire range of possible sources. While such conceptualizations were initially useful, they must be refined and fitted into the present design.

#### 1. Source Variable Components

Accordingly, the five causal levels of analysis may be encouraged to yield five sets, clusters, or components of factors or variables which are listed below in Figure 11.

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Insert Figure 11 here  
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The components themselves represent flexible collections of variables. The variables, in turn, may be inserted into or deleted from specific hypotheses according to the parameters of individual analyses.

The first source component--the psychological, houses variables relating to the perceptions, psycho-dynamics, personality traits, and belief systems of all relevant foreign policy decision-makers.<sup>15</sup>

The political component is comprised of variables relating to the governmental realities which may lead a state to initiate a specific foreign policy. Formal institutional factors, and various domestic pressures which serve to "link" political realities to the official political system and decision-makers are included within this component. More specifically, variables relating to bureaucratic phenomena, public opinion, and so forth, are housed within the political component.

The societal component contains variables which refer to state culture, economic phenomena, social structure, and stability (domestic conflict levels), among others. The societal component represents the final internal component. The remaining two components house variables which are essentially external.

The interstate component is thus comprised of variables which may be conceptualized as either semi-static or dynamic. Semi-static variables include alliance memberships, and bloc memberships among others; while examples of dynamic variables include levels of interstate trade, interstate trade agreements, and policy inputs.

Global systemic variables are found within the global component. They include systemic attributes, such as alliance aggregation, power stratification, and systemic turbulence; status rank variables; subsystemic phenomena; and "textural" variables.

The variables within the above components may all be conceptualized as sources of policy, and, with reference to the comprehensive criterion, may be viewed as comprising the entire range of possible sources. Moreover, it should be pointed out with reference to the criterion of flexibility that neither the number of components nor the number of variables need at any time remain permanently fixed. Indeed, while it is difficult to conceive of any additional components, the number and importance of variables may be expected to vary significantly.

## 2. Classificatory Scheme of States

In order to facilitate the conduct of comparative source analysis, the ideal conceptual framework must provide the means by which actors (states) and foreign policy behavior may be classified. Since variables arising from the five components are conceptualized as independent during source analysis, it is appropriate to regard the type of state as an intervening variable and foreign policy behavior as the dependent variable. Logically, then, it is reasonable to expect the ideal framework to classify all states and all foreign policy behavior. An ideal way to accomplish this task revolves around the construction of two classificatory schemes, often mislabeled--and misunderstood--as typologies.<sup>16</sup> The classificatory scheme of states should be devised on the basis of those attributes which reveal the most about a state's overall foreign policy performance. In other words, while a whole host of attribute variables may easily be delineated, the ideal classificatory scheme within the ideal framework should include those variables likely to exert a significant--albeit intervening--impact upon foreign policy behavior.

It is interesting to note that while scholars of comparative politics have been quick to devise salient classificatory schemes (see, for example, Almond and Powell, 1966; Lijphart, 1969; and Blondel, 1972), foreign policy analysts have at best proceeded slowly. Part of the problem surrounding this pace has been the reluctance on the part of many analysts to treat attributes as intervening variables within the causal or source foreign policy behavioral sequence. Far too many scholars have chosen to regard attributes as independent variables and have thus seen little need for an elaborate intervening classificatory scheme (see, for example, Salmore and Hermann, 1969; and East, 1973). However, when one examines their (implicit?) assumptions about the proper role of attributes, one is hard pressed to find a rationale for the "attributes as [causal?] independent variables" strategy. Since by nature and definition attributes represent relatively static realities (such as size, wealth, political accountability, and so forth), they should not be conceptualized as though they were dynamic and independent. Variables such as domestic conflict and policy inputs should thus be regarded as dynamic, independent, and very different from those which are relatively static. This, of course, is not to imply that those dynamic variables which result from static ones be conceptualized as intervening. Rather, it is only to suggest that a distinction be drawn between those realities which refer to the (attribute) structure and (dynamic) performance of a state.

With this distinction in mind, a number of state attributes may be conceptualized as intervening and coalesced into three distinct dimensions. The first dimension comprises attributes referring to the economic structure of a state. More specifically, the economic structural dimension yields such



variables as gross national product per capita, gross domestic fixed capital formation as a percentage of GNP, percentage of gross domestic product originating in industry, and energy consumption per capita.<sup>27</sup>

The second dimension is comprised of realities associated with the governmental structure and development of a state. Governmental structural variables include legislative effectiveness, number of major cabinet changes, and number of coup d'etats, while developmental variables include number of political parties, local government autonomy, and number of governmental units.

The third and final dimension houses variables which refer to the capabilities of a state. Within this dimension variables of three general classes may be identified. The first class is size and contains variables such as total area, population, and GNP. Military power variables constitute the second class and include total military manpower, total defense expenditures, and number of nuclear weapons. The third class is comprised of resource base variables such as the percentage of total food supply domestically produced and the percentage of energy consumed domestically produced.

These three dimensions may thus be utilized to classify foreign policy actors. Unlike many previous efforts, however, the present framework will not dichotomize states into simple and distortive classifications, such as those encouraged by the oft-cited Rosenau (1966) framework. Instead, the ideal framework should implement a strategy which attempts to position states along a continuum representing the three dimensions. The classificatory scheme of states is thus conceptualized below.

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 Insert Figure 12 here  
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### 3. Classificatory Scheme of Events

The comparative criterion cannot be satisfied unless foreign policy behavior is also classified. As previous critiques have already indicated, far too few analysts have even addressed the problem (see Welch and Triska, 1971; and Andriole, et al., 1975b). However, a rationale for classifying behavior is well within reach: just as behavior may be expected to vary according to the type of state in question, so too should the type of situation or event exert an impact upon behavior. Put somewhat differently, a certain state may be expected to behave somewhat differently when initiating, for example, an essentially economic as opposed to a military policy. The dependent variable cluster must thus accommodate differences which exist among actual foreign policies.

One approach to constructing a classificatory scheme of foreign policy behavior may be found within the concept of an event. As "pieces of reality" (Riker, 1975), events may be scrutinized in a manner which is manageable and reliable. Indeed, "events data" analysis is by no means new to foreign policy analysis (see Burgess and Lawton, 1972). For nearly a decade scholars have been collecting, refining, and analyzing events data. Unfortunately, the use of such data has not yet resulted in the production of much reliable knowledge. Aspects of the problem are undoubtedly related to the failure on the part of many analysts to conceptualize their dependent variables properly.<sup>18</sup> Even those who have consciously converted foreign policy behavior into foreign policy events have failed to specify all of the important event dimensions. Accordingly, the present framework regards events as comprised of six dimensions, each representing an aspect of reality (Andriole, 1975b).

The first dimension is spatial and refers to the area in which the event in question occurs. The second dimension is temporal and refers, of course, to the actual time when an event occurs. The third dimension is relational and houses variables referring to the event's participants. Situational variables, referring to the event attributes of threat, time, and awareness (see Hermann, 1969), comprise the situational dimension. The substantial dimension houses variables which refer to the issue specific nature of the event; while the sixth and final behavioral dimension gives rise to variables relating to the behavioral (cooperative-conflictual) characteristics of an event. The various dimensions, as well as their dimensional attributes, appear in Figure 13.

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 Insert Figure 13 here  
 -----

From Figure 13 it is possible to conceptualize a great many distinctive foreign policy events, which, during the conduct of source analysis, may be conceptualized as dependent variables.

The above conceptualizations of source variable components and the classificatory schemes of states and events enable the foreign policy analyst to explore the milieus from which particular policies are initiated by particular states. The complete source analytical framework thus appears in Figure 14.

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 Insert Figure 14 here  
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#### 4. Process Variable Components; Classificatory Schemes of States and Events

Those interested in constructing and implementing a conceptual framework capable of yielding insight into the processes of foreign policy decision-making must also deal with the perennial tasks of inquiry and the related criteria. Recalling that the analyst must respond to the realities of initiative and responsive decision-making, the ideal conceptual framework must assist those interested in such behavior. Moreover, the framework must enable analysts to conduct comprehensive, comparative, operationalizable, and policy relevant decision-making analyses.

Decision-making behavior normally occurs on effectual level three, the composite group or state level (see Figure 1). The behavior which occurs on the effectual level--as always--constitutes the dependent variable of analysis. As in the case of source analysis, the dependent variable of decision-making analysis is a complex, multi-dimensional one. As a matter of fact, decision-making analysts might conceptualize the very same variable components which source analysts conceptualize as independent as comprising their dependent variable cluster. In other words, the specification of effectual level three might very well lead to the delineation of the very same variables which appear in the (independent) source variable components. The components listed in Figure 11 may thus be conceptualized as source/process components. During the conduct of source analysis the variables within the components need be conceptualized as independent, while during the conduct of decision-making analysis must be regarded as dependent. With an eye toward reality, initiative decision-makers respond to conditions and events which emanate from a variety of sources. Those decision-makers

who respond to conditions or events generally do so when another state (or interstate or global organization) sends an action in their direction. Initiative decision-making analysts thus conceptualize many realities as sources and independent, while those who conduct responsive decision-making analyses generally conceptualize the action of another state (arising from the inter- and/or multistate causal level of analysis) as the independent variable. Figure 15 represents a decision-making process framework.

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 Insert Figure 15 here  
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#### G. AN OVERARCHING CONCEPTUAL FRAMEWORK

Hopefully, the desirability of merging the source and process frameworks (Figures 14 and 15) into a single overarching conceptual framework has already struck the reader. The long journey has thus lead to the 16th figure.

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 Insert Figure 16 here  
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The framework which appears in Figure 16 is comprehensive, comparative, operationalizable, and capable of producing policy-relevant knowledge.

Regarding comprehensiveness, not only does the framework account for all relevant variables and/or variable areas (and provide the means by which variables may be added or subtracted) but it represents the entire



scope of foreign policy behavior. It therefore enables analysts to conduct source and decision-making process analyses.

The criterion of conceptual salience and flexibility is satisfied by the framework's classificatory schemes of states and events, which facilitate the conduct of comparative source and process analyses. The classification of states and events into distinctive classes enables the framework to descriptively portray the relationships among many phenomena and provide insight into how such relationships might yield explanative and predictive knowledge. By classifying states and events, foreign policy analysts might thus explain and predict how, why, and when certain states are likely to initiate or respond to certain events.

The third criterion is always the most difficult to satisfy. At the same time, it is the most important insofar as the satisfaction of all of the other criteria is dependent upon the operational amenability of the framework. The goals of inquiry, then, are also dependent upon the satisfaction of the operationalizability criterion. While there will always be a place for more traditionally or philosophically produced knowledge, the dominance of social scientific methodologies will enable all social scientists to produce more easily verifiable knowledge.

In search of such knowledge, the source/process variable components might be operationalized as follows.<sup>19</sup> First, the psychological component may yield measurable phenomena through the utilization of content analytic data collection techniques. Through an examination of speeches, public documents, interviews, biographies, and the like, it should be possible to gain insight into the psychological dimension of decision-makers (which might

lead to the initiation of certain events or exert an impact upon the processes of initiative or responsive decision-making) in a quantitative way.

The political component may be operationalized by collecting and/or assembling data on bureaucratic processes, elite structures, and so forth; while events data might be utilized to operationalize concepts such as domestic stability in the societal component. Still within this component, there are other variables, such as inflation and unemployment rates, which could be easily operationalized.

The external components may be operationalized in several ways. Within the context of source analysis, variables such as alliance commitments and trade agreements should be relatively easy to operationalize, although variables such as global power stratification, status rank, and those relating to the texture of the global system as a whole, might be more difficult to convert.

Within the contexts of initiative and responsive (decision-making) process behavior, such external variables become perceptual realities with which decision-makers must deal. Such external variables must thus be analyzed as perceptual phenomena.

The classificatory scheme of states may be operationalized by simply searching for measurable conversions to the aforementioned dimensional concepts. Fortunately, much attribute data presently exists and is readily accessible, and as such data is assembled and/or collected, an empirically based typology of states should eventually emerge.

Construction of the foreign policy events classificatory scheme is also indebted to the work of those who have pioneered new and sophisticated operational/methodological strategies. Indeed, as a result of the steps

which have already been skillfully taken, it should be possible to "code" foreign policy events on the basis of all of the event dimensions and dimensional attributes (Andriole, 1975d).

The final, policy-relevance, criterion is of more recent vintage. While scholars of international relations and foreign policy have always been at least implicitly concerned with the relationship between knowledge and action, scientific scholars of interstate politics and foreign policy have more recently attempted to produce policy-relevant knowledge in an explicit way. Motivated by such phenomena as the Eastonian (1969) call to arms and pressure from the scholarly and policy-making communities, many political scientists have happily declared their allegiance to the post-behavioral "credo of relevance." As a practicing credo, post-behavioralism requires analysts to conduct research with an explicit eye to real world policy problems and issues. More specifically, it requires analysts to conduct research with an explicit eye to real world policy problems and issues. More specifically, it requires foreign policy analysts to engage in inquiry for the purpose of satisfying the informational needs of decision-makers so that they might act more "rationally." Initially identified in the abstract through the utilization of a decision process model, such needs may be satisfied through the successful implementation of the proposed conceptual framework.<sup>20</sup>

Successful implementation may occur on and from a variety of levels and vantage points. As the above discussion of quantifiable data has already indicated, the operationalized framework will easily accommodate quantitative cross-national analyses. Accordingly, it should be possible to describe, explain, and predict the (source and process) foreign policy behavior of

certain classes of states in the context of certain classes of events. Such analyses might not provide insight into how, when, or why, for example, the U.S., might be likely to act, but they would enable both analysts and policy-makers to assign particular states to specific classes and conduct their analyses and decision-making accordingly.

Those interested in the foreign policy behavior of particular states, such as those regarded as "super-powers," might employ the overarching framework to conduct single and comparative case study analyses. Of much more depth than cross-national analyses, case studies are often of much more immediate value to policy-makers faced with a particular adversary in a particular situation. Scholars able to explain and predict the behavior of "adversaries"--based, of course, upon the actions and reactions displayed in the past by the particular state(s)--might place themselves in very useful--and powerful--positions insofar as the information produced is completely accurate, and readily communicated and assimilated into the decision-making process.

Rather than focusing upon the behavior of but one state, analysts might thus utilize the framework for the purpose of comparing the behavior of two or more states within a given class, or of two or more states extracted from several classes. In addition, the same analysts might conduct the above analysis within the contexts of one or more classes of events.

Those primarily interested in reconstructing past events for purely historical purposes, might implement the framework to lend order to a seemingly unmanageable mosaic. Indeed, several events, time period, or state histories might be reconstructed in order to clarify a heretofore unfathomable past.

The framework may also serve as the pivot around which usually interdisciplinary foreign policy analyses might be engineered. While an interdisciplinary approach has already been prescribed, the framework's explicit nature might facilitate group ventures where economists, psychologists, historians, political scientists, sociologists, and so forth might delve into a particular branch of foreign policy behavior. Such teams might also engage in single and comparative case studies and, with the assistance of tactical, methodologists, sophisticated cross national analyses.

#### H. CONCLUSION

This long journey has led to the construction of what appears to be a comprehensive, comparative, operationalizable, and policy-relevant framework for analysis. At the present time a group of analysts are testing the framework and hope to produce useful empirical and comparative generalizations concerning the sources and processes of foreign policy behavior. While this whole process may have appeared much too grandiose, it was felt that perhaps the surest path to progress is a slightly regressive one. Indeed, if we do not learn to do what we have been trained to do, our analyses will continue to contribute to the miscellaneous potpourri which we call foreign policy knowledge. The motivations for this tiresome journey were thus simple. When an answer was difficult to supply to the simple question, "what do we, as contemporary social scientists, really know about foreign policy behavior,?" the decision was made to posit on a positive answer well within reach, no matter how tedious or unexciting. Hopefully, the implementation--and constant evolution--of the above framework will eventually enable us to reply, "quite alot."



## NOTES

\*As has often been my good fortune during the past few years, during the process of research I have incurred an intellectual and personal debt to Jon Wilkenfeld and Jerry Hopple. My appreciation is also extended to Molly Parker for the usual, careful preparation of the manuscript. All errors, omissions, and the like, are, however, obviously my responsibility.

My thanks is also extended to the students who have perceptively participated in my "Comparative Study of Foreign Policy," and to all those--far too numerous to mention individually--who have participated in the refinement of the framework.

<sup>1</sup>Regarding these and other issues commonly associated with "scope and method," see Van Dyke (1960), Hayes and Hedlund (1970), Welsh (1973), Meehan (1965), Kaplan (1964), and Dahl (1969), among many others.

<sup>2</sup>For some time now scholars have been concerned with levels of analysis, although seldom in a systematic or comprehensive manner (see, for example, Singer (1961) and Isaak (1974). Based upon existing research (Andriole, 1974b, 1975d), what follows represents an attempt to add depth to previous conceptualizations and to employ the new construct for a specific purpose.

<sup>3</sup>The traditional disciplinary boundaries are fast becoming blurred as more and more social scientists stage successful jailbreaks out of their disciplines and into the preserve of others. The above conceptualization, which is explicitly adisciplinary, is designed to encourage and facilitate such jail-breaks.

<sup>4</sup>The following is largely based upon Andriole (1974a, 1974b).

<sup>5</sup>Again, see those concerned with the conduct of social analysis, such as Van Dyke (1960), Welsh (1973), and Meehan (1965).

<sup>6</sup>The great methodological debate has contributed very little to the production and cumulation of knowledge. While so many concerned scholars have been willing to add fuel endlessly to the fires of debate, many others have all but cleared away their smoke, only to find the wisdom of evaluating all methods on their merits and not on the persuasiveness or reputations of their advocates. Thoughtful scholars are thus preoccupied with the inherent power and appropriateness of all methods--past, present, and future.

<sup>7</sup>Analytical frameworks, models, designs, and so forth, have long been constructed and implemented by social scientists. Indeed, the abstract symbolic (verbal, conceptual, mathematical) presentation of aspects of reality in manners fathomable to contemporary analysts represents an almost "standard procedure." While many recognize few significant differences among frameworks, models, and the like, this paper recognizes several. First, analytic models--by definition--are somewhat more sophisticated than frameworks and conceptual schemes. In short, models tend to constitute more formal abstractions of reality. Moreover, they may be descriptive, explanative, predictive, or prescriptive (see, Meehan, 1965: 149-150; Kaplan, 1964: 258-293; Van Kyke, 1960: 104-107; Francis, 1972: 1-17; and Rudner, 1966: 28-53). Secondly--and relatedly, models seem most appropriate to the presentation of reality after such has been faithfully represented by a construct. In other words, only after an abstraction becomes validated or "vindicated" can it be elevated to model status. Accordingly, that which exists prior to validation might properly be regarded as a framework for analysis. As an isomorphism of a portion of reality, such a device might aid the analyst in the discovery of knowledge--and in the construction of a model of reality.

Frameworks may thus also be descriptive, explanative, and predictive; they may also be verbal, conceptual, mathematical, or similarly symbolic.

The present journey is primarily concerned with the evaluation, construction, and implementation of conceptual framework<sup>1</sup> designed to facilitate insight into the sources and processes of foreign policy behavior.

<sup>8</sup>Those criteria have been discussed and applied in Andriole (1974a, 1974b), and Andriole, Wilkenfeld, and Hopple (1975b).

<sup>9</sup>Again, "productive" here is employed literally. No longer should social and political scientists engage in the dialectics of useless debate.

<sup>10</sup>Especially within the context of "relevance." See Platig (1967), Tanter and Ullman (1972), and Andriole (1974b).

<sup>11</sup>Within the past decade a great many texts, scholarly articles, and even new journals have been devoted to the study of foreign policy. New courses have sprung up around such material and at present more than a few colleges and universities recognize the distinction between the study of interstate and global politics from the study of foreign policy. See Rosenau (1968), who discusses the birth of the field--and who recognizes the distinctions in an important text (1961, 1969). Also see McGowan and Shapiro (1973) for a detailed inventory of the hypotheses which have been tested by contemporary social scientific foreign policy analysts. Finally, see Hermann and Waltz (1970) who have compiled and edited an anthology of foreign policy course syllabi.

<sup>12</sup>See Knorr and Rosenau (1969), Young (1969), and Russett (1969) for information on those who have fueled the fire.

<sup>13</sup>This section is based upon Andriole (1974a, 1974b).

<sup>14</sup>Obviously, foreign policy analysts are unable to delve into reality, emerge with a neat foreign policy analytical package, and then subject it to inquiry. Reality is continuous as Figure 3 suggests.

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 Insert Figure 8 here  
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Foreign policy analysts thus break into this endless exchange and through the process of abstraction emerge with a manageable framework for analysis.

<sup>15</sup>The following component sections are based upon Andriole (1974b), Andriole, Wilkenfeld, and Hopple (1975a, 1975b), Hopple (1975a, 1975b, 1975c), and Andriole (1975b; 1975c) where the components have been elaborately specified.

<sup>16</sup>"In the social sciences there is some confusion over whether or not classificatory schemes are in fact typologies. Indeed, far too many social scientists routinely treat classificatory schemes as though they were typologies (Kegley, 1973; Tiryakian, 1968). In order to clarify some of the issues surrounding the typological procedure--and in the process draw out some important distinctions between typological and classificatory procedures-- it is helpful to regard the typological procedure as requiring that (1) 'each and every member of the population studied may be classified in one and only one of the major types delineated, which is equivalent to requiring that the . . . [typology] . . . must be comprehensive and its terms mutually exclusive'; (2) the dimensions be 'differentiated into types . . . [and] . . . be explicitly stated;' and (3) the dimensions ' . . . be of central importance for the purpose of the research' to be conducted. Moreover, the

typological procedure requires that it yield a typology which codifies and predicts all aspects of its types (Tiryokian, 1968: 178). The requirements of prediction is particularly interesting and relevant to the issues at hand. According to Tiryokian (1968: 178-197), if a typology (of, for example, political parties) is able to identify five main types which are each comprised of a number of traits, then by simply highlighting one of the types one would be in a position to predict the associated traits. Thus, if one were to highlight type A, then one would be able to predict the presence of traits  $a_1, a_2, a_3, \dots, a_n$ .

Classificatory schemes, on the other hand, do not necessarily offer such prediction. While able to codify various types, those who construct classificatory schemes sometimes do so as a first step toward typological (predictive) construction." Such is the nature of the present schematic construction. See Andriole (1975a: 9-10).

<sup>17</sup>These variables as well as those which appear below are the product of the Interstate Behavior Analysis (IBA) Project. See Wilkenfeld (1975) and Andriole (1975e).

<sup>18</sup>"Obviously, many foreign policy analysts have attempted to define their analytical unit; unfortunately, they have seldom done so on the basis of any common orientative or methodological assumptions. Instead, they have all too often defined foreign policy according to '... mental model(s) of the distinguishing features of state behavior ... on the assumption that the classes defined represent characteristics which cluster empirically' (Kegley, 1973: 8). Accordingly, foreign policies have been defined on the bases of region, design, resource, values, goals, orientations, and motivations, among others (Hermann, 1972; Kelley, 1973; Salmore and Munton, 1974)." See Andriole (1975a: 102) and Andriole, Wilkenfeld, and Hopple (1975a).



<sup>19</sup>The task of operationalization could easily involve years of work and pages and pages of manuscript. Obviously, what follows constitutes an extremely superficial look at the task. See Hopple (1975d) for a much more comprehensive delineation of the problems and prospects associated with the operationalization of many foreign policy variables.

<sup>20</sup>As but one approach to the identification of decision-making informational needs, decision process models might be constructed. From such models it should be possible to locate in an abstract way the kinds of information which decision-makers need in order to navigate the decision course.

One such model has been constructed by Lasswell (1956) and has been employed to locate the informational needs of foreign policy decision-makers (Andriole, 1974a). Lasswell's model is comprised of seven functions or steps which all decision makers must take. These steps in turn enable social scientists to determine--if only in a general abstract way--the kinds of analyses which might be helpful to decision-makers. Figure 17 depicts the abstract decision-making process and the nature of some relevant analyses.

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Insert Figure 17 here  
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The framework which appears in Figure 16 might very well yield productive conceptual, predictive, forecasting, and decision-making analyses, which foreign policy decision-makers might find extremely useful.

FIGURE 1

DUAL SOCIAL SCIENTIFIC LEVELS OF ANALYSIS

Causal Levels		Effectual Levels	
1. Individual		Individual	1.
2. Group		Group	2.
3. Composite Group (State)		Composite Group (State)	3.
4. Inter- and/or Multistate		Inter- and/or Multistate	4.
5. Global Systemic		Global Systemic	5.
Independent Variables		Dependent Variables	

FOREIGN POLICY ANALYTICAL FRAMEWORKS (1945-1974)\*\*

\*This chart represents a summary of a critique which first appeared in Andriole (1974a).  
 \*\*Criteria scores do not necessarily indicate the degree to which the criteria is satisfied.  
 \*\*\*Within the context of foreign policy analysis the criterion of conceptual salience may be translated into one of comparability.

FIGURE 3

FOREIGN POLICY SOURCE ANALYSIS

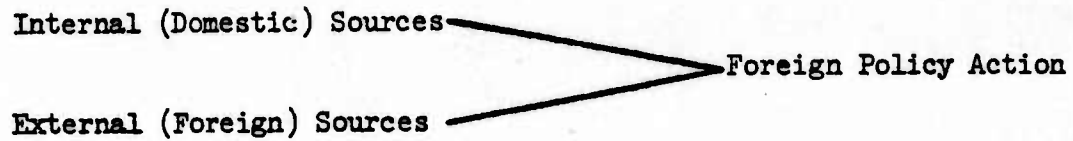


FIGURE 4

FOREIGN POLICY SOURCE BEHAVIOR

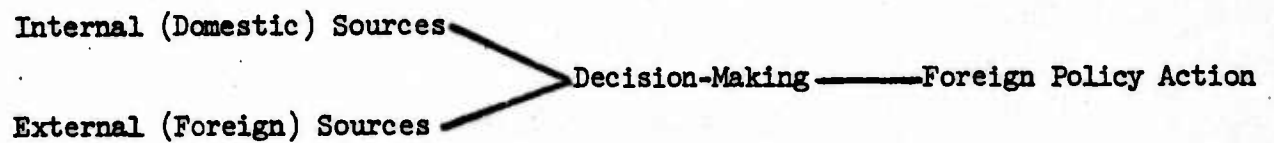


FIGURE 5

RECONCEPTUALIZED SOURCE ANALYSIS

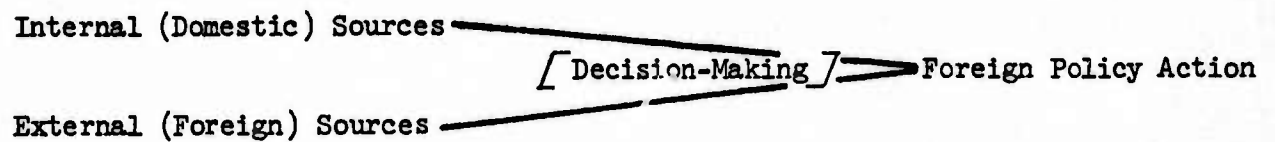


FIGURE 6

FOREIGN POLICY DECISION-MAKING PROCESS ANALYSIS

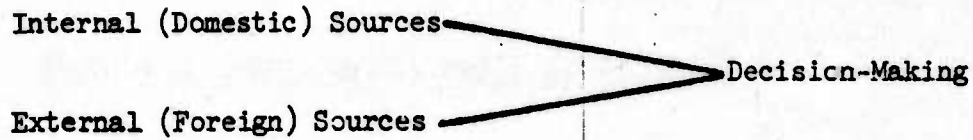


FIGURE 7

SIMPLE INTERACTION PROCESS

(adapted from Edwards, International Political Analysis)

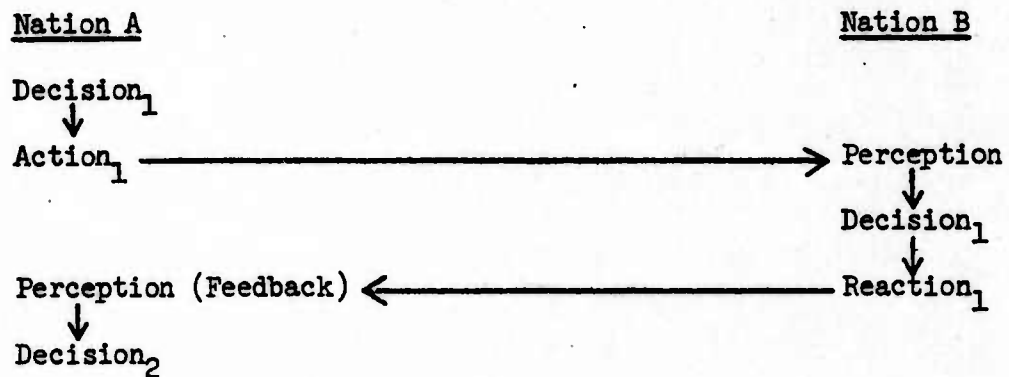


FIGURE 8

CONTINUOUS INTERACTION PHENOMENA

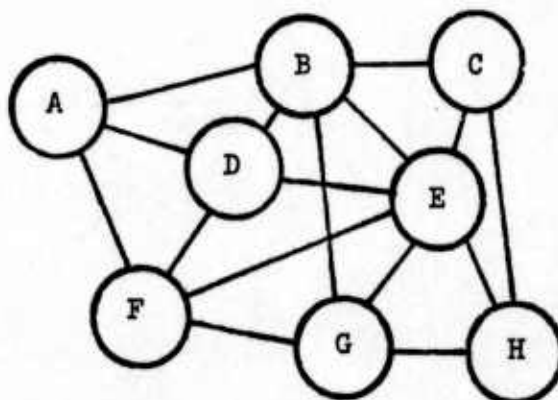
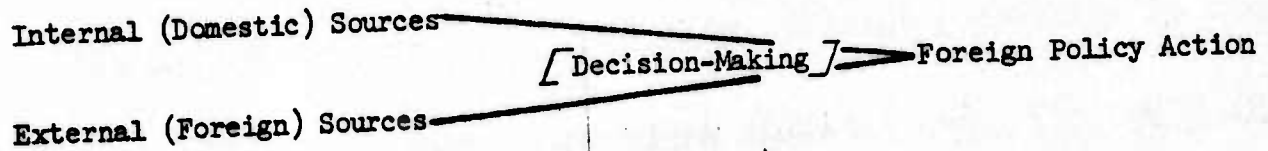




FIGURE 9

# FOREIGN POLICY SOURCE BEHAVIOR AND ANALYSIS



## Levels of Analysis

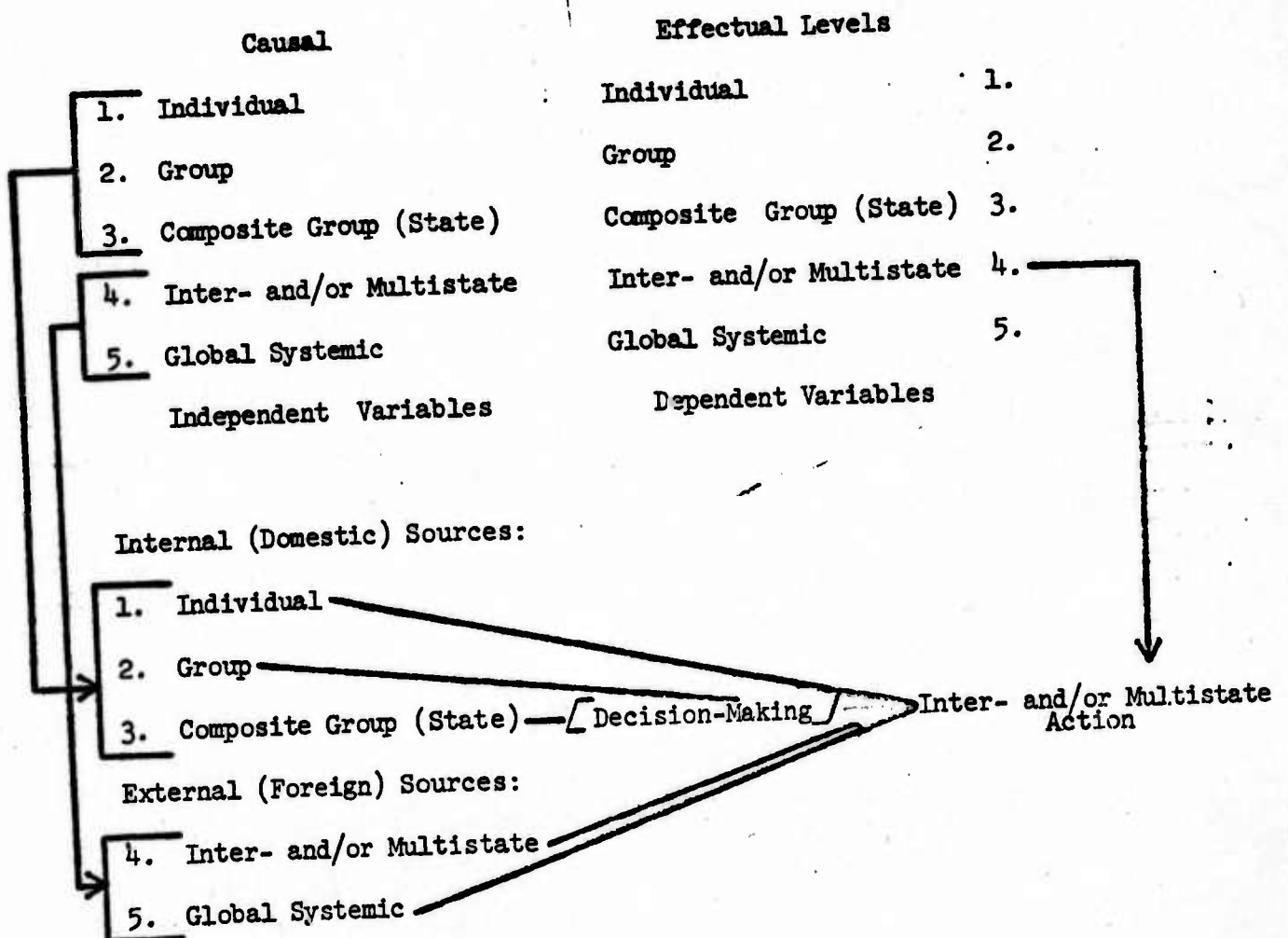


FIGURE 10

FOREIGN POLICY DECISION-MAKING PROCESS  
BEHAVIOR AND ANALYSIS

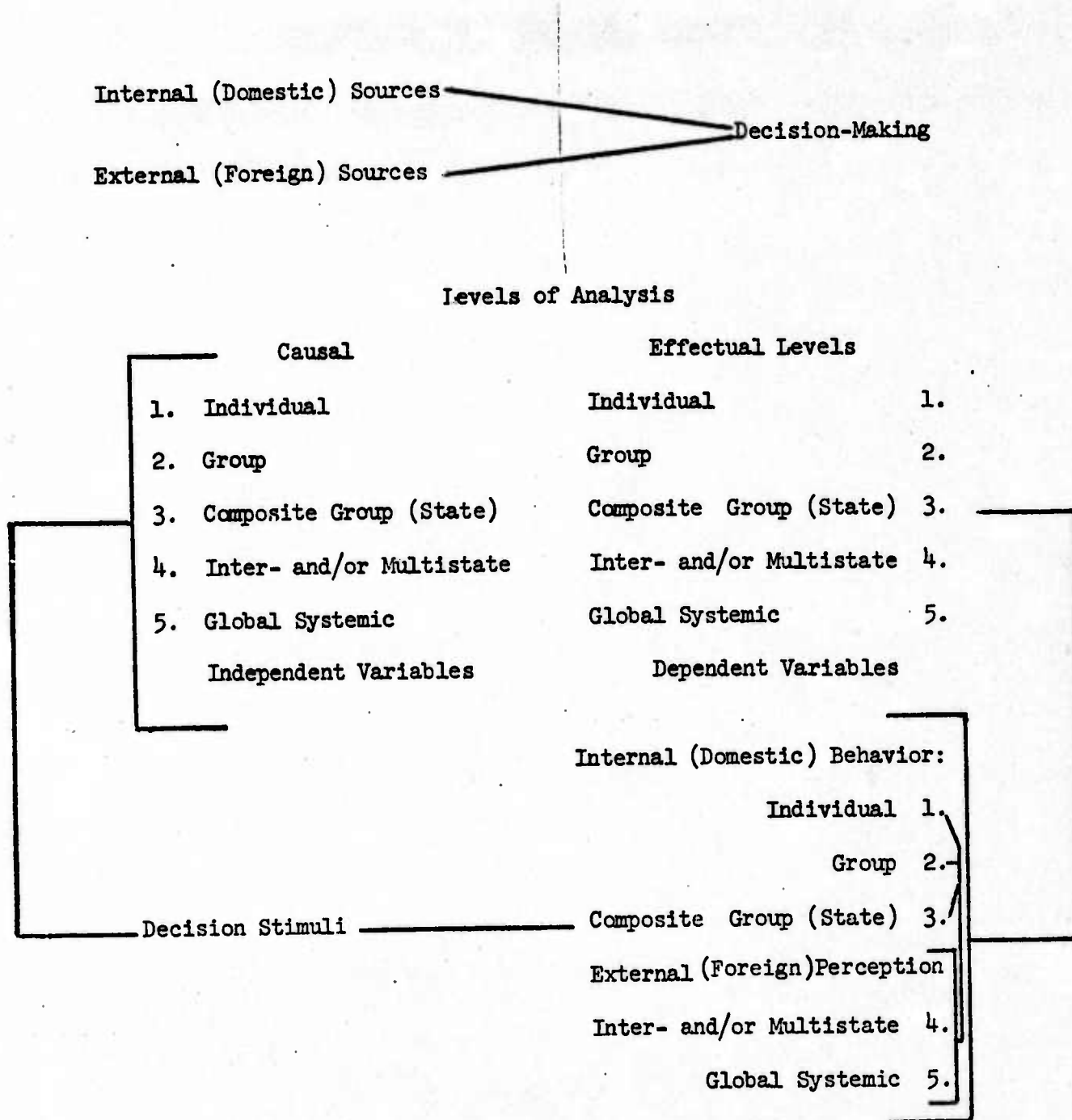


FIGURE 11  
SOURCE VARIABLE COMPONENTS

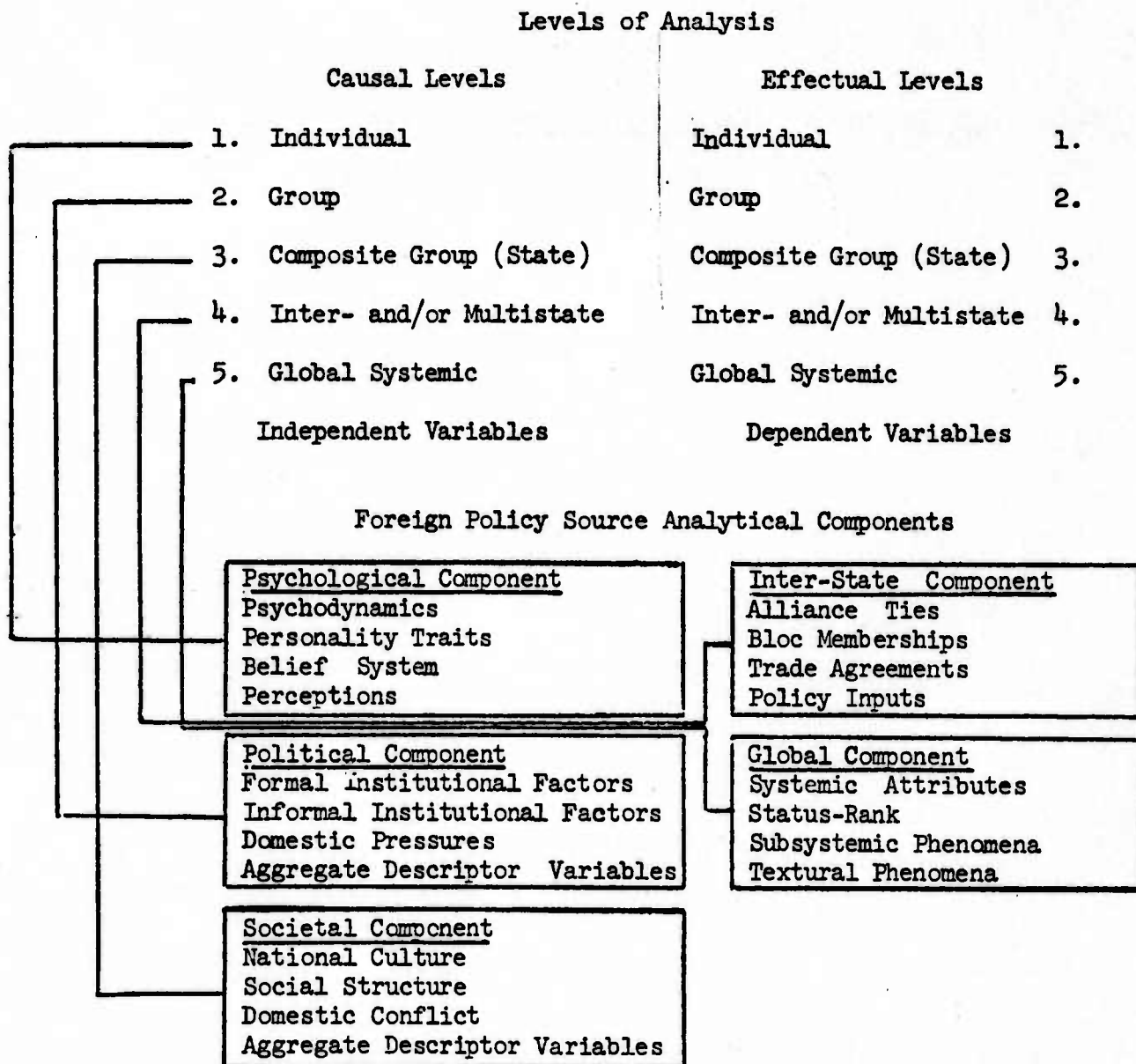


FIGURE 12

CLASSIFICATORY SCHEME OF STATES

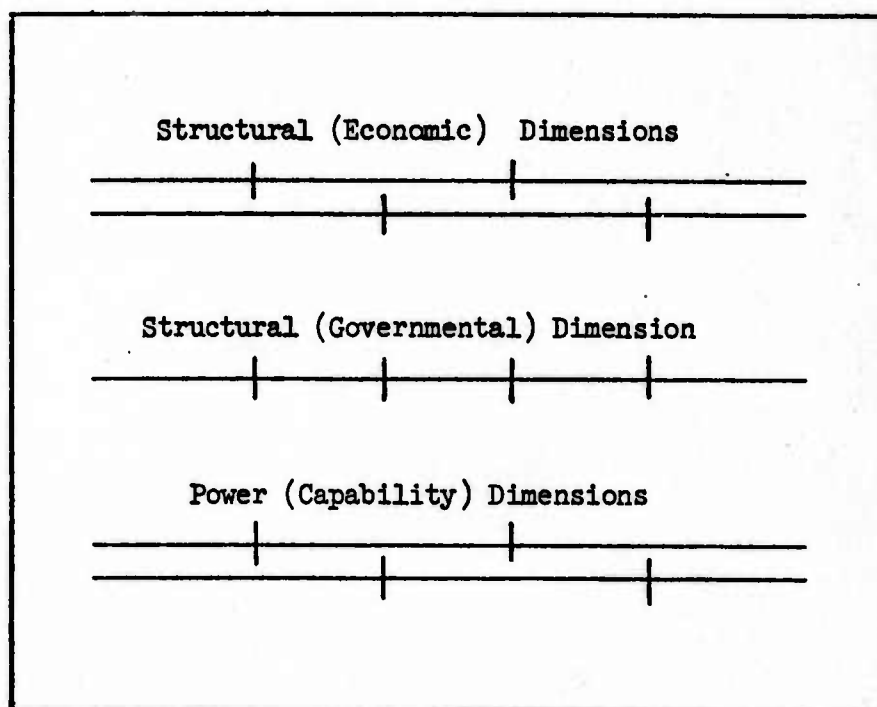


FIGURE 13  
CLASSIFICATORY SCHEME OF EVENTS

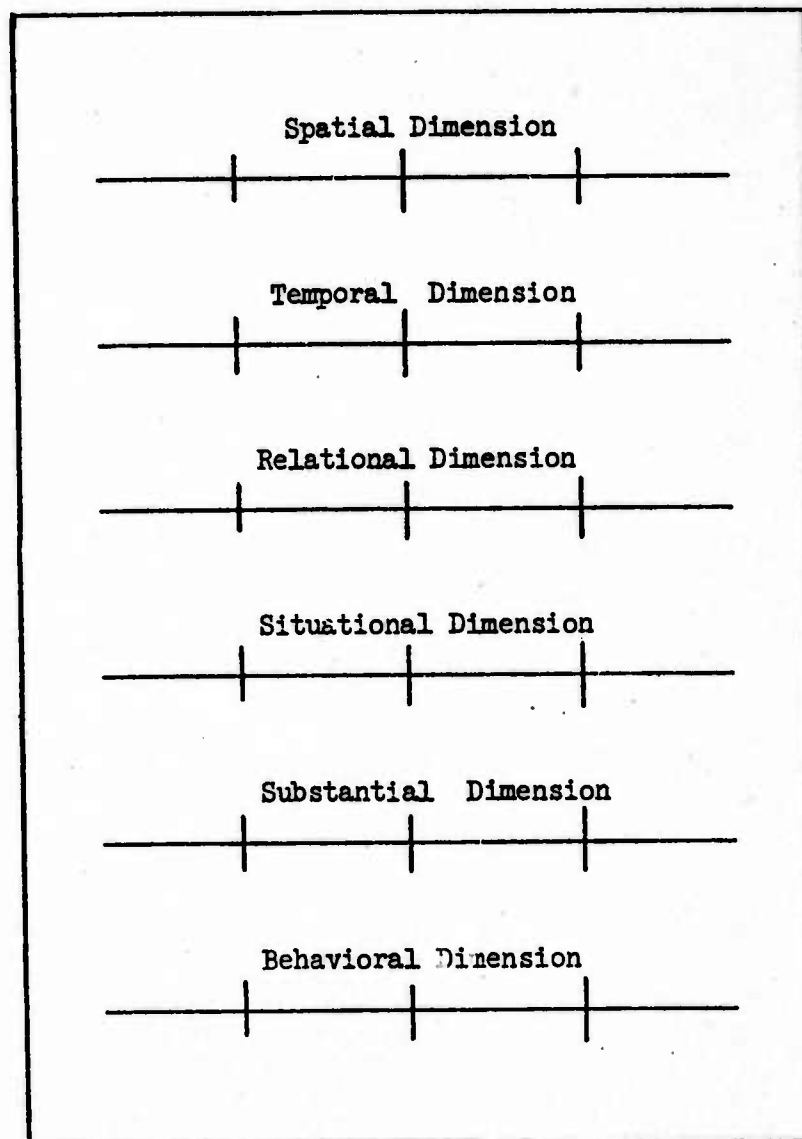




FIGURE 14

A FRAMEWORK FOR THE COMPARATIVE ANALYSIS  
 OF FOREIGN POLICY SOURCE BEHAVIOR

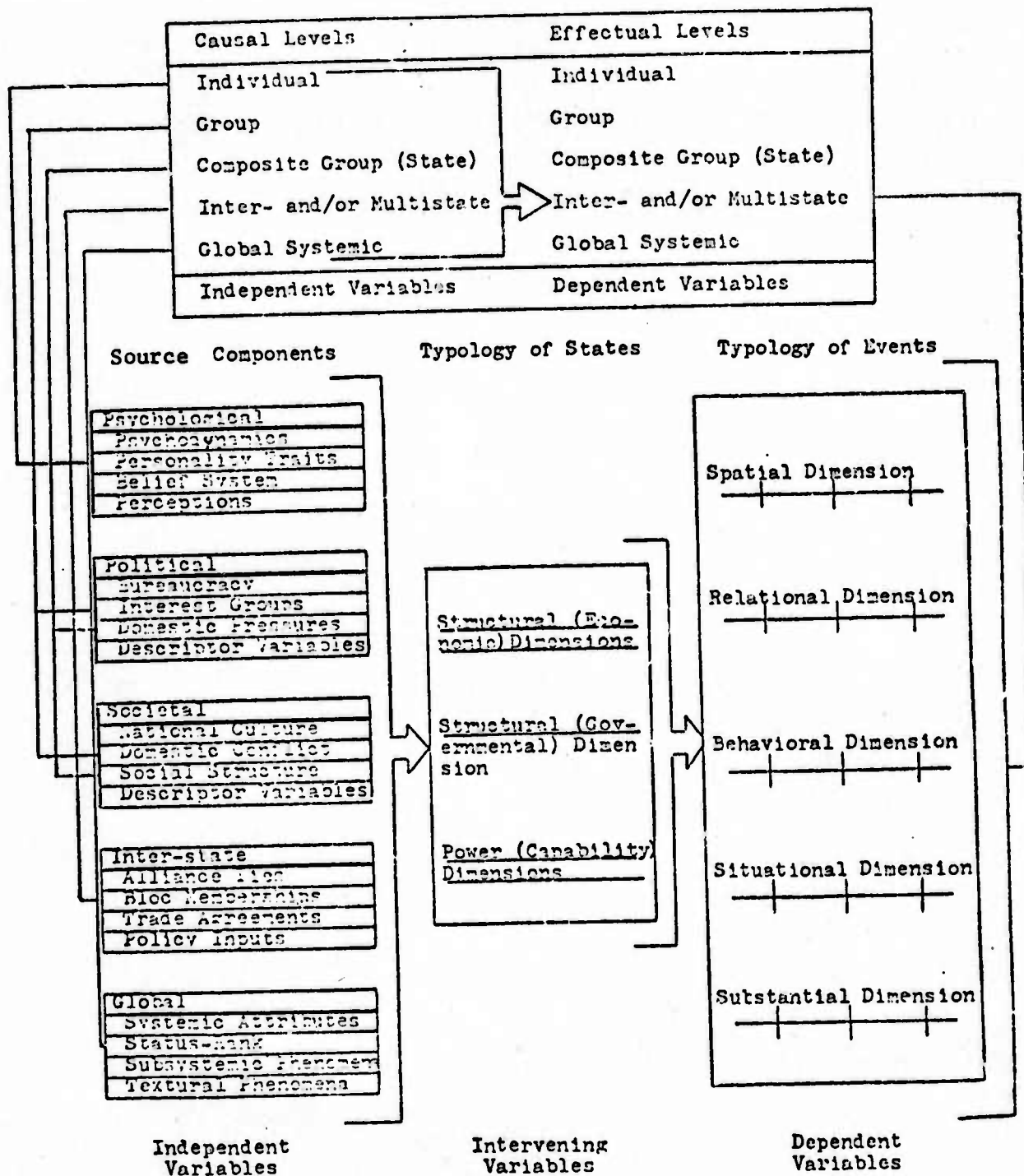


FIGURE 15-A

A FRAMEWORK FOR THE COMPARATIVE ANALYSIS OF  
FOREIGN POLICY INITIATIVE DECISION-MAK-  
ING PROCESS BEHAVIOR

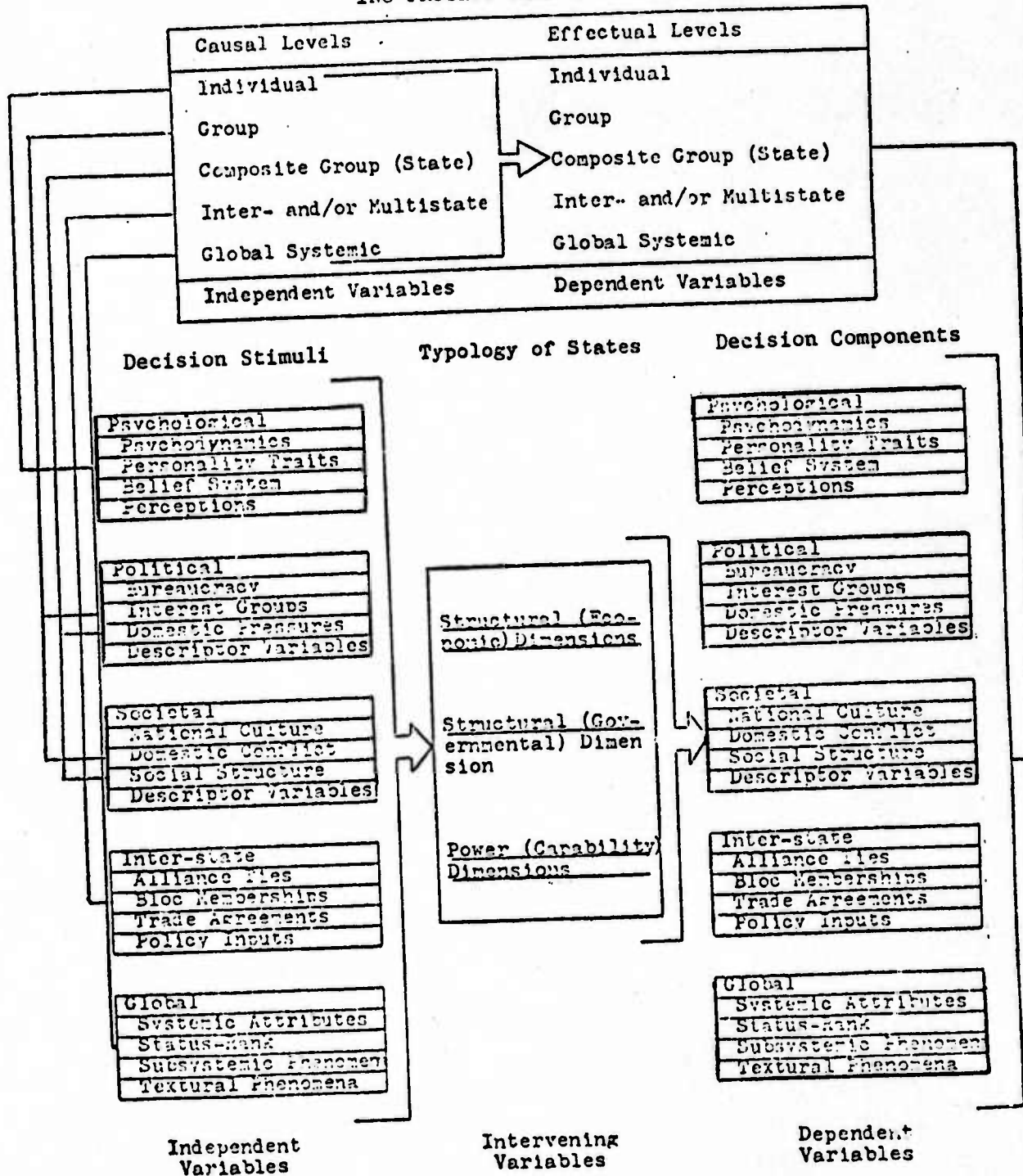


FIGURE 15-B

A FRAMEWORK FOR THE COMPARATIVE ANALYSIS OF  
 FOREIGN POLICY RESPONSIVE DECISION-MAKING  
 PROCESS BEHAVIOR

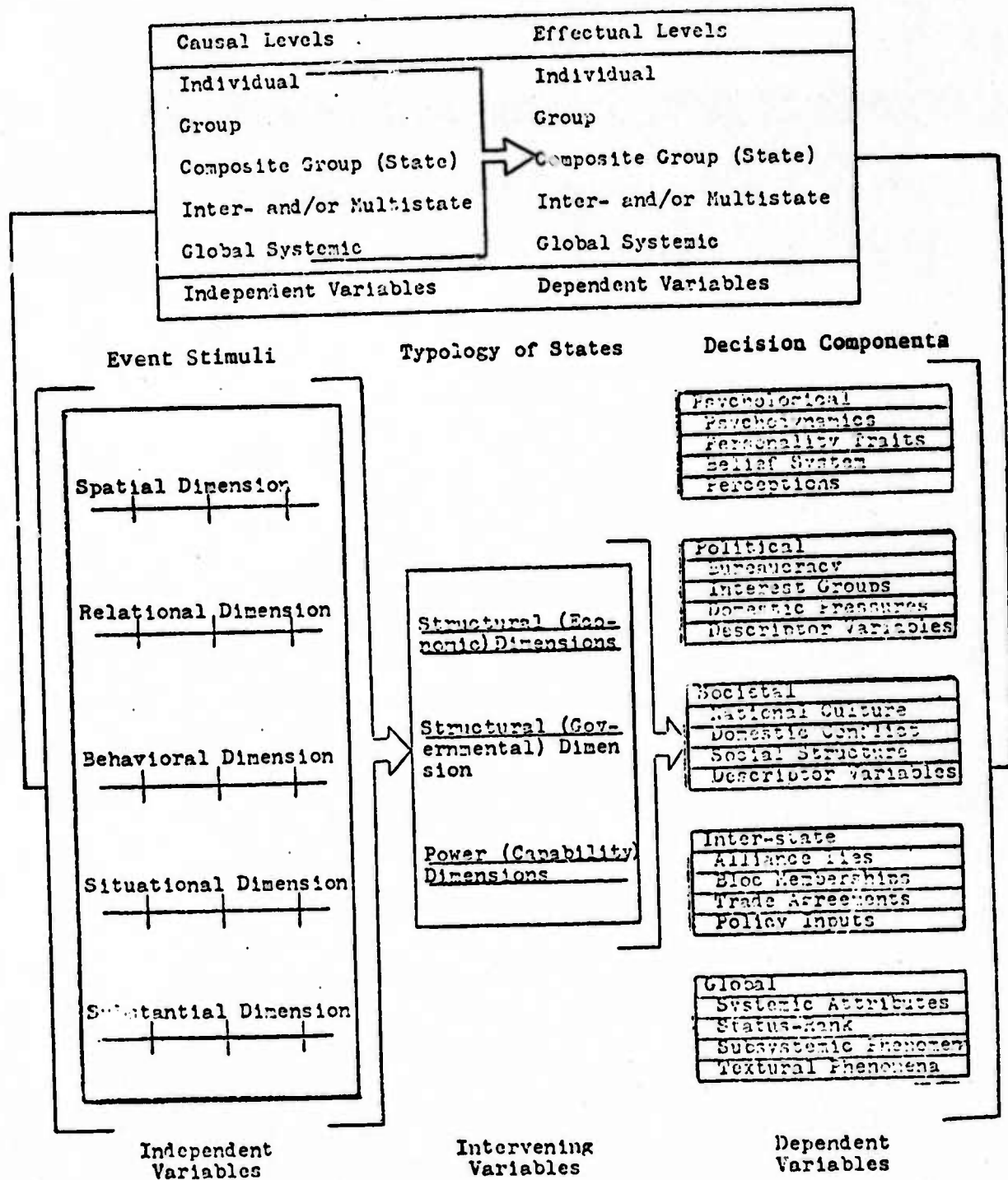


FIGURE 16 \*

AN EMERGING FRAMEWORK FOR THE COMPARATIVE ANALYSIS  
 OF FOREIGN POLICY SOURCE AND RESPONSIVE  
 DECISION-MAKING PROCESS BEHAVIOR

Source/Process Components

1. Psychological Component
Psychodynamics
Personality Traits
Belief System
Perceptions
2. Political Component
Formal Institutional Factors
Informal Institutional Factors
Domestic Pressures
Appropriate Descriptor Variables
3. Societal Component
National Culture
Social Structure
Domestic Conflict
Appropriate Descriptor Variables
4. Inter-State Component
Alliance Ties
Reciprocity
Trade Agreements
Policy Issues
5. Global Component
Systemic Attributes
Status-Role
Subsystemic Phenomena
Textural Phenomena

Typology of States

Structural (Economic) Dimensions
Structural (Governmental) Dimensions
Power (Capability) Dimensions

Typology of Events

Spatial Dimension

Temporal Dimension

Relational Dimension

Situational Dimension

Substantial Dimension

Behavioral Dimension

← Source Behavior and Analysis  
 Responsive Decision-Making Behavior and Analysis →

\*See Figure 15A for the analysis of initiative decision-making process behavior.

- \_\_\_\_\_, J. WILKENFELD, and G. W. HOPPLE (1975a) "The Sources and Processes of Foreign Policy Behavior: A Panoramic Conceptualization." Presented at the International Studies Association Annual Meeting. Washington, D.C., February.
- \_\_\_\_\_ (1975b) "A Framework for the Comparative Analysis of Foreign Policy Behavior." *International Studies Quarterly*, 19 (June): 160-198.
- BLONDEL, J. (1972) *Comparing Political Systems*. New York: Praeger.
- BURGESS, P. M. and R. W. LAWTON (1972) *Indicators of International Behavior: An Assessment of Events Data Research*. Sage Professional Papers in International Studies.
- DAHL, R. A. (1969) *Modern Political Analysis*. Englewood Cliffs: Prentice-Hall
- EAST, M. A. (1973) "Size and Foreign Policy Behavior: A Test fo Two Models." *World Politics* 24 (July): 556-576.
- EASTON, D. (1969) "The New Revolution in Political Science." *American Political Science Review* 63 (December): 1051-1061.
- FRANCIS, W. L. (1972) *Formal Models of American Politics: An Introduction*. New York: Harper and Row.
- HAYES, L. D. and R. D. HEDLUND (1970) *The Conduct of Political Inquiry: Behavioral Political Analysis*. Englewood Cliffs: Prentice-Hall.
- HERMANN, C. F. (1972) "Policy Classification: A Key to the Comparative Study of Foreign Policy," pp. 58-79 in J. N. Rosenau, V. Davis, and M. East (eds.) *The Analysis of International Politics*. New York: The Free Press.
- \_\_\_\_\_ (1969) "International Crisis as a Situational Variable," pp. 409-421 in J. N. Rosenau (ed.) *International Politics and Foreign Policy*. New York: The Free Press.



## REFERENCES

- ALMOND, G. A. And G. B. POWELL (1966) Comparative Politics: A Developmental Approach. Boston: Little, Brown.
- ANDRIOLE, S. J. (1975a) "The Definition, Conceptualization, and Classification of Foreign Policy: Pacifying a Few Exasperating Analytical Issues." Interstate Behavior Analysis (IBA) Project Working Paper #3, Department of Government and Politics, University of Maryland, January.
- \_\_\_\_\_ (1975b) "Interstate Realities and the Conduct of Foreign Policy." Interstate Behavior Analysis (IBA) Project Research Report #5, Department of Government and Politics, University of Maryland, January
- \_\_\_\_\_ (1975c) "Global Systemic Variables and the Study of Foreign Policy." Interstate Behavior Analysis (IBA) Project Research Report #6, Department of Government and Politics, University of Maryland, February.
- \_\_\_\_\_ (1975d) "The Levels of Analysis Problem and the Study of Politics: The Cases of Foreign Policy, Interstate Political, and Global Systemic Analysis--Again." Department of Government and Politics, University of Maryland (mimeo).
- \_\_\_\_\_ (1975e) "General Coding Instructions: Typology of States." Interstate Behavior Analysis (IBA) Project Research Report #14, Department of Government and Politics, University of Maryland, June.
- \_\_\_\_\_ (1974a) "Foreign Policy Research and the Perennial Problems of Political Inquiry." Presented at the International Studies Association Annual Meeting. St. Louis, March.
- \_\_\_\_\_ (1974b) "Public Policy Relevance and Contemporary Social Scientific Inquiry: The Case of Foreign Policy Analysis." Ph.D. Dissertation, University of Maryland.

\_\_\_\_\_ and K. N. WALTZ (1970) Basic Courses in Foreign Policy: An Anthology of Syllabi. Beverly Hills: Sage.

HOPPLE, G. W. (1975a) "The Sociatal Component and the Comparative Study of Foreign Policy." Interstate Behavior Analysis (IBA) Project Research Report #4, Department of Government and Politics, University of Maryland, January.

\_\_\_\_\_ (1975b) "The Comparative Study of Foreign Policy and the 'Data Gap' Problem: An Interim Report." Interstate Behavior Analysis (IBA) Project Research Report #13, Department of Government and Politics, University of Maryland, July.

\_\_\_\_\_ (1974a) "The Psychological Component and the Comparative Study of Foreign Policy Behavior: Issues, Strategies, and Problems of Operationalization." Interstate Behavior Analysis (IBA) Project Research Report #2, Department of Government and Politics, University of Maryland, November.

\_\_\_\_\_ (1974b) "Internal Political Variables and the Comparative Study of Foreign Policy Behavior: A Framework for Research and Analysis." Interstate Behavior Analysis (IBA) Project Research Report #3, Department of Government and Politics, University of Maryland, December.

ISAAK, R. I. (1974) "The Individual in International Politics: Solving the Level-of-Analysis Problem." Polity 7 (Winter): 264-276.

JONES, S. D. and J. D. SINGER (1972) Beyond Conjecture in International Politics. Itasca, Illinois: Peacock.

KAPLAN, A. (1964) The Conduct of Inquiry: Methodology for Behavioral Science. Scranton: Chandler.

KEGLEY, C. W., JR. (1973) A General Empirical Typology of Foreign Policy Behavior. Sage Professional Papers in International Studies.

- SALMORE, S. A. and D. E. MUNTON (1974) "Classifying Foreign Policy Behavior An Empirically Based Typology," in J. N. Rosenau (ed.) *Comparing Foreign Policy*. Beverly Hills: Sage.
- SALMORE, S. A. and C. F. HERMANN (1969) "The Effect of Size, Development and Accountability on Foreign Policy." *Papers of the Peace Research Society (International)*: 15-30.
- SINGER, J. D. (1961) "The Levels-of-Analysis Problem in International Relations," pp. 77-92 in K. Knorr and S. Verba, eds., *The International System: Theoretical Essays*. Princeton: Princeton University Press.
- TANIER, R. and R. C. ULLMAN (1972) *Theory and Policy in International Relations*. Princeton: Princeton University Press.
- TIRYOKIAN, E. (1968) "Typologies." *International Encyclopaedia of the Social Sciences* 15: 177-186.
- VAN DYKE, V. (1960) *Political Science: A Philosophical Analysis*. Stanford: Stanford University Press.
- WELCH, W. and J. F. TRISKA (1971) "Soviet Foreign Studies and Foreign Policy Models." *World Politics* 23 (July): 704-733.
- WELSH, W. A. (1973) *Studying Politics*. New York: Praeger.
- WILKENFELD, J. (1975) "Comparative Foreign Policy: A Typology of States." Interstate Behavior Analysis (IBA) Project Research Report #7, Department of Government and Politics, University of Maryland, March. Presented at the Southwestern Social Science Association Annual Meeting. San Antonio, March.
- YOUNG, O. R. (1969) "Professor Russett: Industrious Tai, or to a Naked Emperor." *World Politics* 21 (April): 468-511.

- KNORR, K. and J. N. ROSENAU (1969) *Contending Approaches to International Politics*. Princeton: Princeton University Press.
- LASSWELL, H. D. (1956) *The Decision Process: Seven Categories of Functional Analysis*. College Park: Bureau of Governmental Research (University of Maryland).
- LIJPHART, A. (1968) "Typologies of Democratic Systems." *Comparative Political Studies* I: 3-43.
- MC GOWAN, P. J. and H. B. SHAPIRO (1973) *The Comparative Study of Foreign Policy: A Survey of Scientific Findings*. Beverly Hills: Sage Publications.
- MEEHAN, E. J. (1965) *The Theory and Method of Political Analysis*. Homewood: orsey.
- PFALTZGRAFF, JR., R. L. (1972) "International Studies in the 70s," in Pfaltzgraff, Jr., ed., *Politics and the International System*. Philadelphia: Lipponcott.
- PLATIG, R. E. (1967) *International Relations Research: Problems of Evaluation and Advancement*. Santa Barbara: Clio.
- RIKER, W. H. (1957) "Events and Situations." *Journal of Philosophy* 54 (January): 57-70.
- ROSENAU, J. N. (1969) *International Politics and Foreign Policy*. Second Edition. Glencoe: Free Press.
- \_\_\_\_\_ (1968) "Comparative Foreign Policy: Fad, Fantasy, or Field?" *International Studies Quarterly* 12 (September): 296-329.
- \_\_\_\_\_ (1961) *International Politics and Foreign Policy*. Glencoe: Free Press.
- RUDNER, R. S. (1966) *Philosophy of Social Science*. Englewood Cliffs: Prentice-Hall.
- RUSSETT, B. R. (1969) "The Young Science of International Politics." *World Politics* 22 (October): 87-94.

PART II



## II. PAPERS

## A. RESEARCH REPORTS

IBA Research Report #1: Stephen J. Andriole, Jonathan Wilkenfeld, and Gerald W. Hopple, "A Framework for the Comparative Analysis of Foreign Policy Behavior," International Studies Quarterly, June, 1975.

IBA Research Report #2: Gerald W. Hopple, "The Psychological Component and the Comparative Study of Foreign Policy Behavior: Issues, Strategies, and Problems of Operationalization."

IBA Research Report #3: Gerald W. Hopple, "Internal Political Variables and the Comparative Study of Foreign Policy: A Framework for Research and Analysis."

IBA Research Report #4: Gerald W. Hopple, "The Societal Component and the Comparative Study of Foreign Policy."

IBA Research Report #5: Stephen J. Andriole, "Interstate Realities and the Conduct of Foreign Policy."

IBA Research Report #6: Stephen J. Andriole, "Global Systemic Variables and the Comparative Study of Foreign Policy."

IBA Research Report #7: Jonathan Wilkenfeld, "Comparative Foreign Policy: A Typology of States," presented at the Southwestern Political Science Association Annual Meetings, San Antonio, Texas, March 26-29, 1975.

IBA Research Report #8: Stephen J. Andriole, "Conceptualizing the Dimensions of Interstate Behavior," presented at the Southwestern Political Science Association Annual Meetings, San Antonio, Texas, March 26-29, 1975.

IBA Research Report #9: Stephen J. Andriole, Jonathan Wilkenfeld, and Gerald W. Hopple, "The Sources and Processes of Foreign Policy Behavior: A Panoramic Conceptualization," presented at the International Studies Association, Annual Meeting, Washington, D.C., February, 19-22, 1975.

IBA Research Report #10: Gerald W. Hopple, "Public Opinion and the Comparative Study of Foreign Policy."

IBA Research Report #11: Gerald W. Hopple, "Comparative Foreign Policy: Determinants of Action and Reactions," presented at the Southwestern Political Science Association Annual Meeting, San Antonio, Texas, March 26-29, 1975.

IBA Research Report #12: Stephen J. Andriole, "Foreign Policies of Scarcity: Some Implications for Research and Analysis," presented at the International Studies Association, Annual Meeting, Washington, D.C., February 19-22, 1975.

IBA Research Report #13: Gerald W. Hopple, "The Comparative Study of Foreign Policy and the 'Data Gap' Problem: An Interim Report."

IBA Research Report #14: Stephen J. Andriole, "General Coding Instructions: Typology of States."

IBA Research Report #15: Stephen J. Andriole "The Comparative Study of Foreign Policy: En Route to a Productive Conceptual Framework."

#### B. WORKING PAPERS

IBA Working Papers #1: Stephen J. Andriole, "International Behavior Analysis and the Perennial Problems of Political Inquiry."

IBA Working Papers #2: Gerald W. Hoppo, "The Psychological Component and the Comparative Study of Foreign Policy: The 'Relative Irrelevance' of Two Types of Sources."

IBA Working Paper #3: Stephen J. Andriole, "The Definition, Conceptualization, and Classification of Foreign Policy: Pacifying a Few Exasperating Analytical Issues."

IBA Working Papers #4: Gerald W. Hoppo, "The Sources and Processes of International Behavior: An Explicit Conceptualization With a View Toward Analysis."

### III. REPORT SUMMARY

#### A. TECHNICAL PROBLEMS

The International Behavior Analysis (IBA) Project has been conceived as a long range research project designed to provide explanative and predictive insight into the actions and interactions of nations. More specifically, the project has been designed to explain and predict how, when, and why certain nations are likely to act in response to certain sets of internal (domestic) and external (foreign) stimuli.

Since a whole host of analysts have attempted to explain and predict international behavior with little or no real success, it was decided early in the conceptual stages of the IBA Project that an overarching analytical framework be constructed. Such construction was posited as necessary to the organization and integration of the seemingly endless number of factors to be considered in the analysis of international behavior. Additionally, framework construction was posited as a device for the organization of research activities. PART I of this report (especially sections C, E, F, and G) has already expounded upon these notions.

Accordingly, the construction and specification of an overarching analytical framework has been retained as the initial and primary task of the IBA project, and the one with which the principal investigators have been involved under the terms of the present contract (see PART II, section II).

#### B. GENERAL METHODOLOGY

Thus far, the principal investigators have been concerned with integrating as much of the professional literature as possible under a single analytical umbrella. The "methodology" has thus been basic; indeed, the principal investigators have strongly posited the necessity of defining and conceptualizing the phenomena in question before attempting to design sophisticated methodological strategies for the phenomena's explication (see below, section VII-D). We have, however, been cognizant of potential problems involved in the operationalizability as a criteria which must be met by frameworks of this sort.

#### C. TECHNICAL RESULTS

Five source variable components (collection of factors relevant to international behavior) have been identified and specified: (1) psychological; (2) political; (3) societal; (4) interstate; and (5) global-systemic (see PART I, section I-F-1). They represent collections of factors, or variables, which might give rise to certain types of international behavior; that is, they might function as the source of international behavior. The same components have been identified for the conduct of decision-making or process analysis. Since nations must respond to certain (internal and/or

external) stimuli by deciding precisely what to do, decision-making behavior and analysis may be viewed as distinct from the analysis of the behavior and/or conditions which occasion decision-making. Such (decision-making) behavior occurs when a nation initiates an external action and when a nation must respond to the action of another nation. Distinctions may thus be drawn among the factors or conditions which lead a nation to act, the processes of initiative decision-making, and the processes of responsive decision-making. Logically, then, such distinctions point to three separate instances of analysis, or, to the analysis of international action, reaction, and interaction.

In addition to the identification and specification of five source-process components, the principal investigators have developed two classificatory schemes. The first is designed to capture the differences which exist among nations. More specifically, it provides for the classification of nations on the bases of three general dimensions: (1) governmental structure, (2) economic structure, and (3) power capabilities. The second scheme is designed to capture the differences which exist among international actions, which are classified on the bases of spatial, temporal, relational, situational, substantial, and behavioral dimensions (see PART I, sections I-2 and I-3).

The source-process variable components and the classificatory schemes of nations and actions were developed to facilitate the analysis of how, why and when certain nations are likely to act, react, and interact within the context of certain actions. In other words, the research which is to follow the construction of the overarching analytical framework will be explicitly comparative, yet will logically and almost necessarily concentrate upon "major" international actors.

#### D. IMPLICATIONS FOR FUTURE RESEARCH

The construction of an overarching analytical framework represents but one major task of what was originally conceived as a three-year research project. Since each major task was conceived as corresponding roughly to one year of research, the following major tasks are proposed as comprising yet two more years of work:

##### Primary and Subsidiary tasks of year 2: Operationalization and data assembly

(1) Operationalized definitions will be assigned to variable components, the typology of nations, and the typology of events. Each component has already been delineated exhaustively and specific variables have been identified. During the second year, each of these variables will be defined operationally. The initial phase of the second year of research will also entail a "clean-up" operation to ensure that all potentially relevant specific variables have been identified and defined operationally. The two typologies will also be converted from conceptual to measurable phenomena.

(2) Previously collected data will be assembled. Most of this phase will concentrate on the WEIS data set.

(3) Data assembly operations will also be completed. Some new data, primarily psychological in nature, will be generated.

(4) The final task of the second year is the designing and testing of data handling computer programs. This is an obvious precondition for the hypothesis testing which will be the focus of the third year of research activity.

Primary and subsidiary tasks of year 3: Analysis

- (1) Cross-national hypothesis testing.
- (2) Case-study hypothesis testing.
- (3) Dissemination of results



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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)  The objective of the International Behavior Analysis (IBA) Project is to construct and implement an analytical framework capable of providing insight into the actions and interactions of certain states in certain situations. The Project's emphasis is thus comparative and in this connection will construct and implement a typology of nations and a typology of international events.		

A great deal of previous research was studied and integrated into the overarching framework of the IBA Project. Behavioral techniques have been utilized to insure its coherency and replicability. Interrelationships between certain factors (variables) have been indicated within the contexts of international source and decision-making behavior, and, moreover, within the contexts of different situations and nations.

The result of this effort are present within the series of analytical frameworks which appear in this report (See Figures 14, 15A, 15B, and 16). Causal relationships are specified as are the typologies of nations and events. Within the context of source behavior and analysis, five sets of variables have been identified: (1) psychological; (2) political; (3) societal; (4) interstate; and (5) global. Nations are classified on the basis of three dimensions: (1) economic; (2) governmental; and (3) capability; and events are classified on the basis of (1) spatial; (2) relational; (3) temporal; (4) situational; (5) substantial; and (6) behavioral dimensions. Within the context of decision-making process analysis, the same sets of variables may be viewed as the sources of a decision as well as the components of the decision itself. During the conduct of initiative decision-making behavior, the components function as both "cause and effect," while during the conduct of responsive decision-making behavior or the sets of variables function as the effect of an external event stimuli. Year Two of the IBA Project will see the principal investigators assigning empirical weights to all of the elements of the frameworks (for 56 nations over a five year period). Year Three will concentrate upon analysis.

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